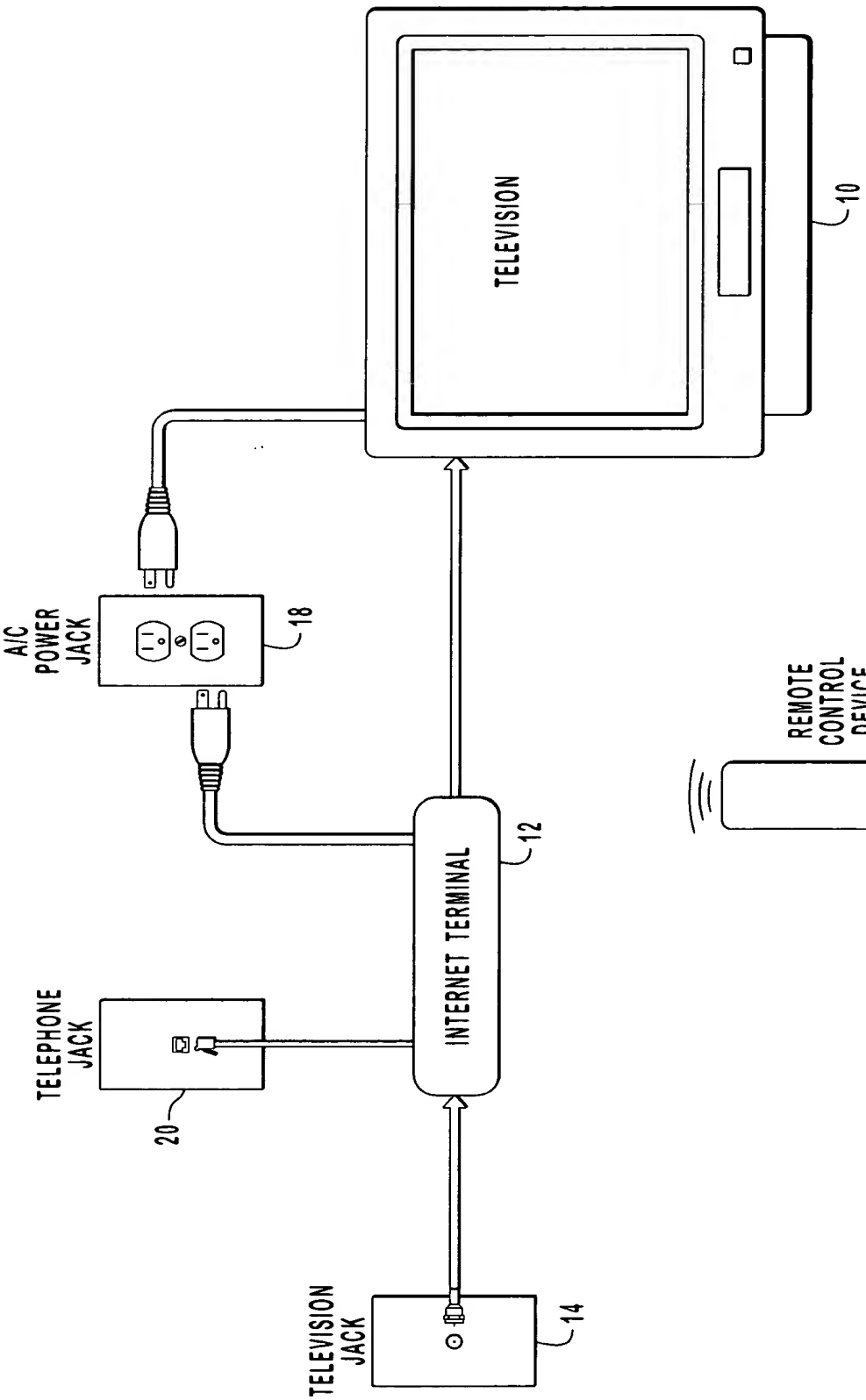

FIG. 1
(PRIOR ART)

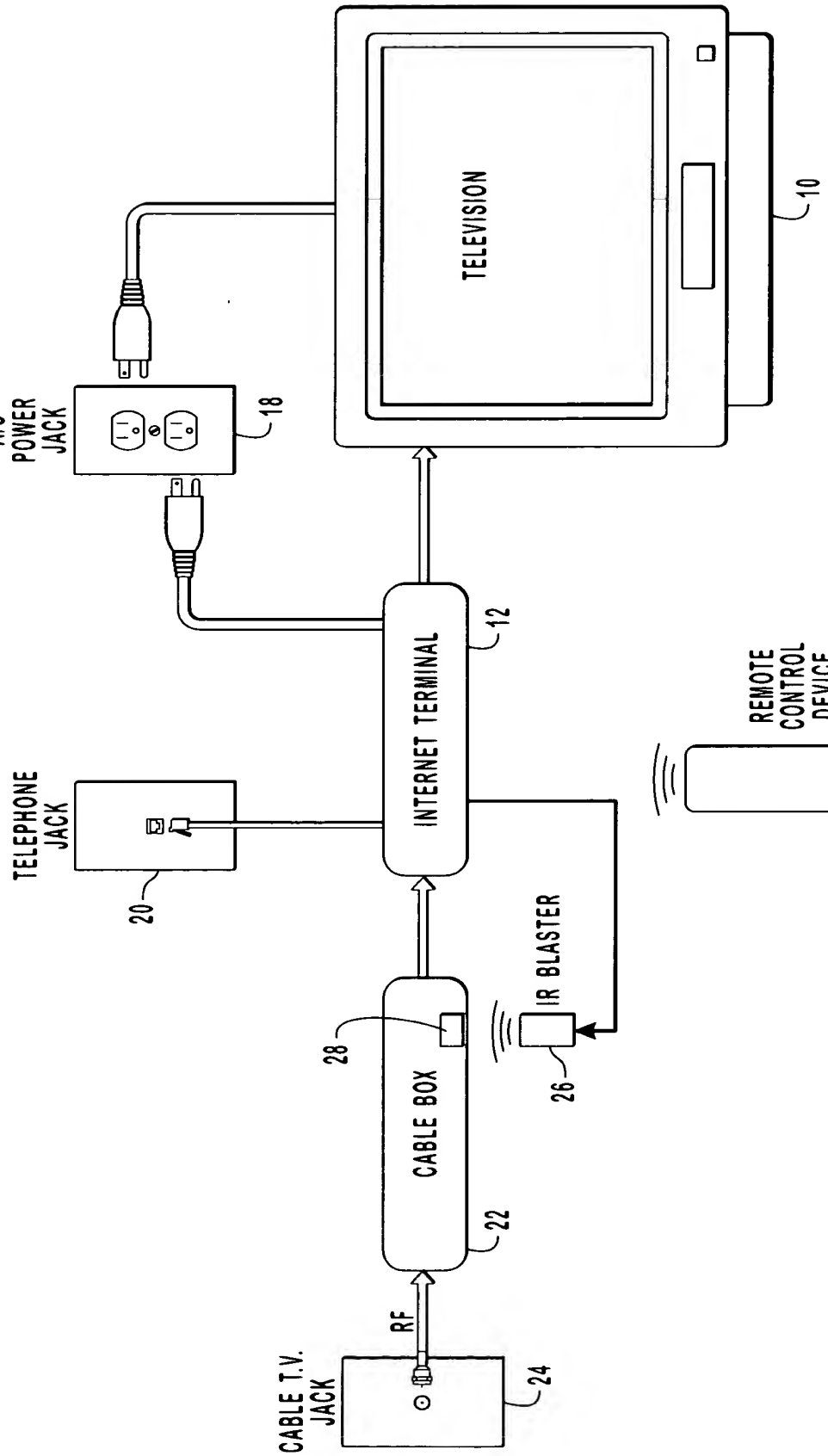

FIG. 2
(PRIOR ART)

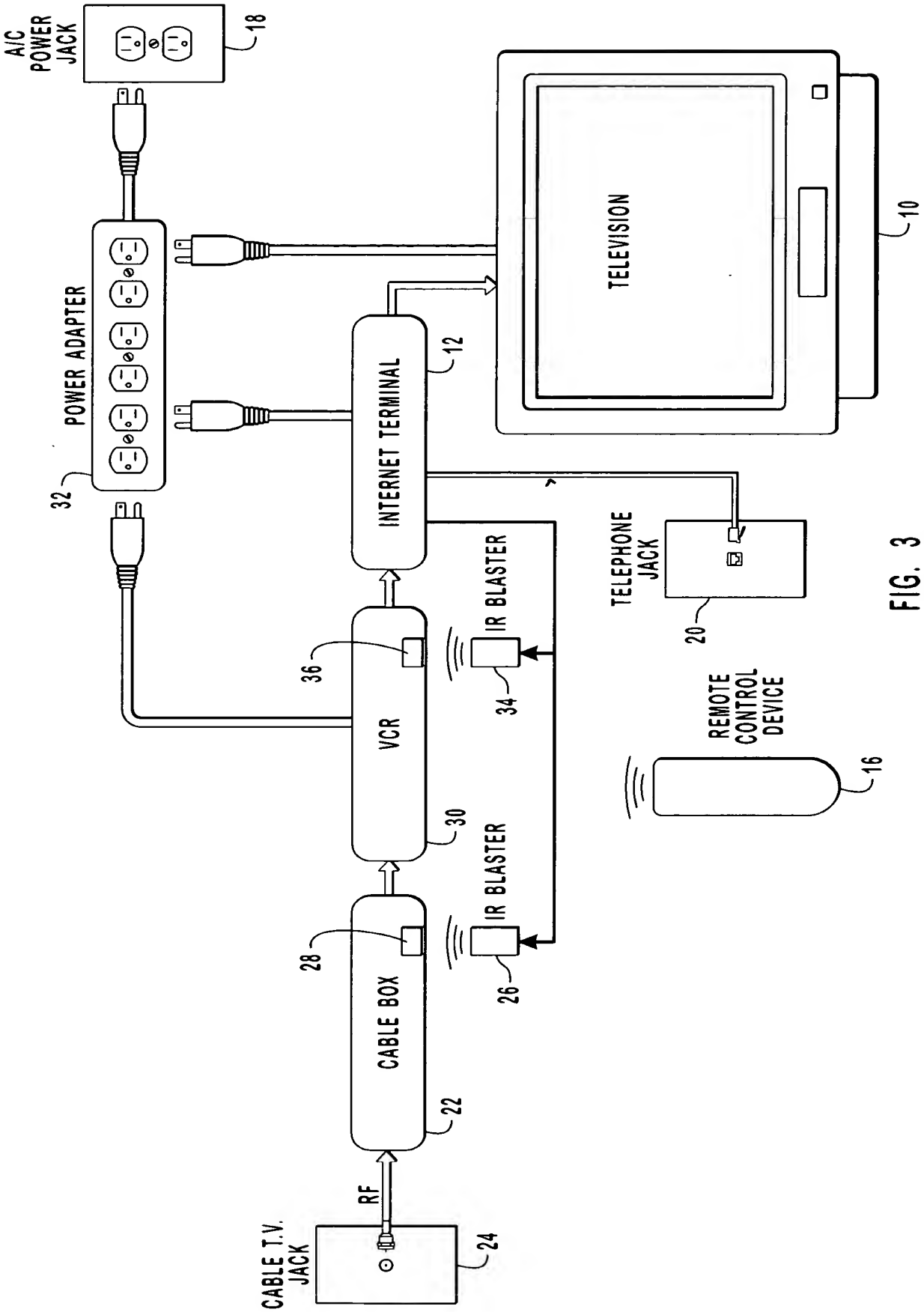

FIG. 3
(PRIOR ART)

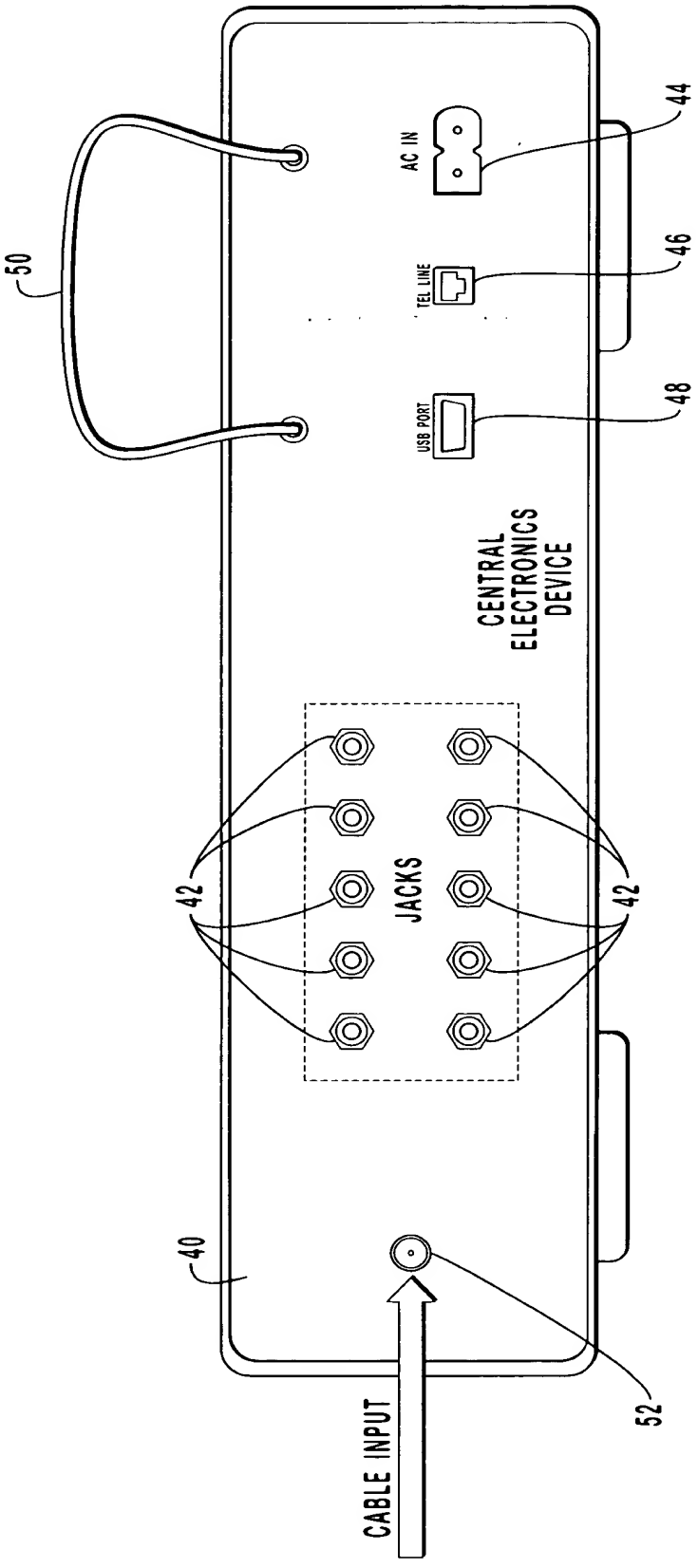
50
AC IN
44
TEL LINE
46
USB PORT
48
CENTRAL ELECTRONICS DEVICE
JACKS
42
42
40
CABLE INPUT
52

FIG. 4

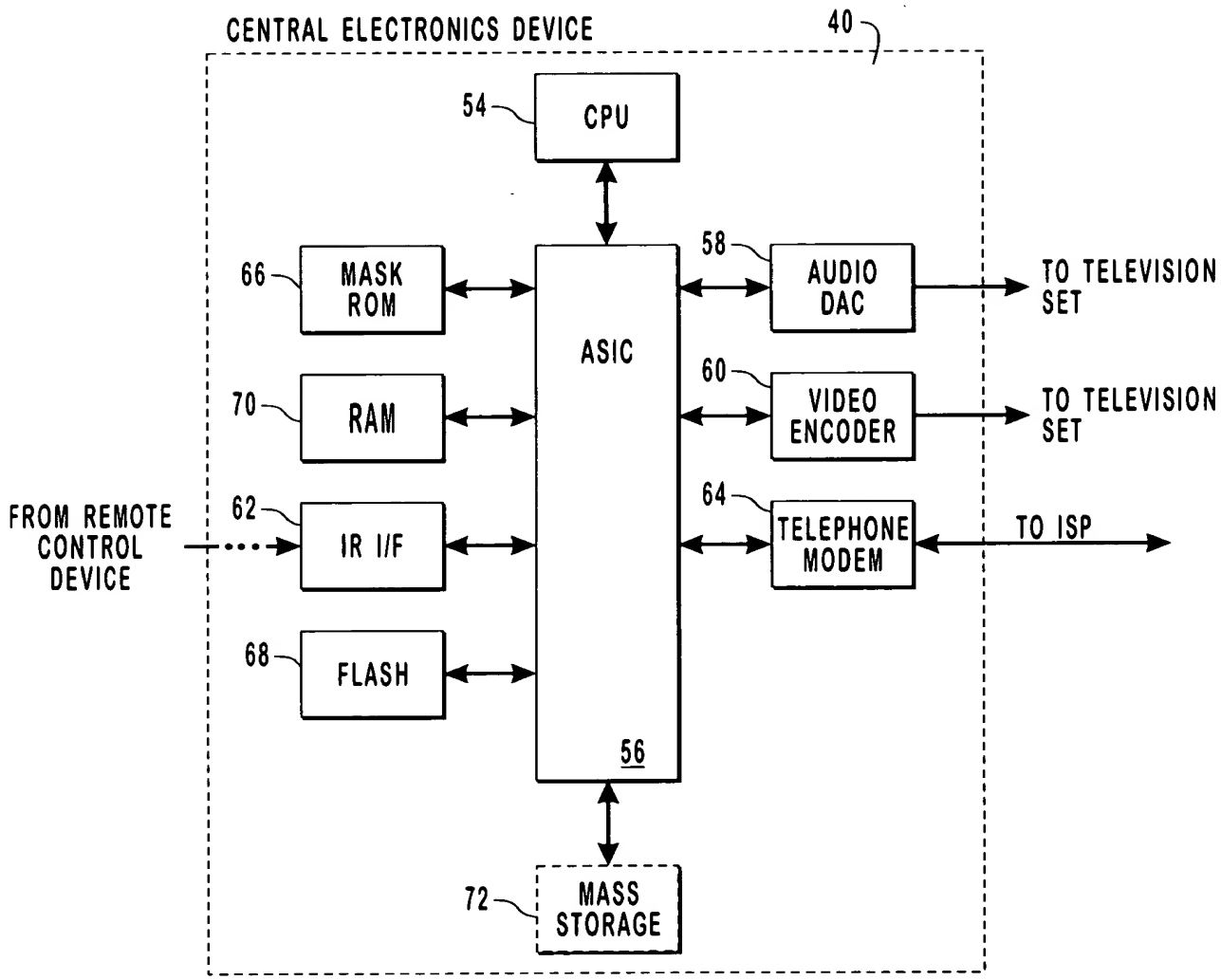
CENTRAL ELECTRONICS DEVICE
40
54
CPU
66
MASK ROM
70
RAM
62
IR I/F
68
FLASH
ASIC
56
58
AUDIO DAC
60
VIDEO ENCODER
64
TELEPHONE MODEM
72
MASS STORAGE
TO TELEVISION SET
TO TELEVISION SET
TO ISP
FROM REMOTE CONTROL DEVICE

FIG. 5

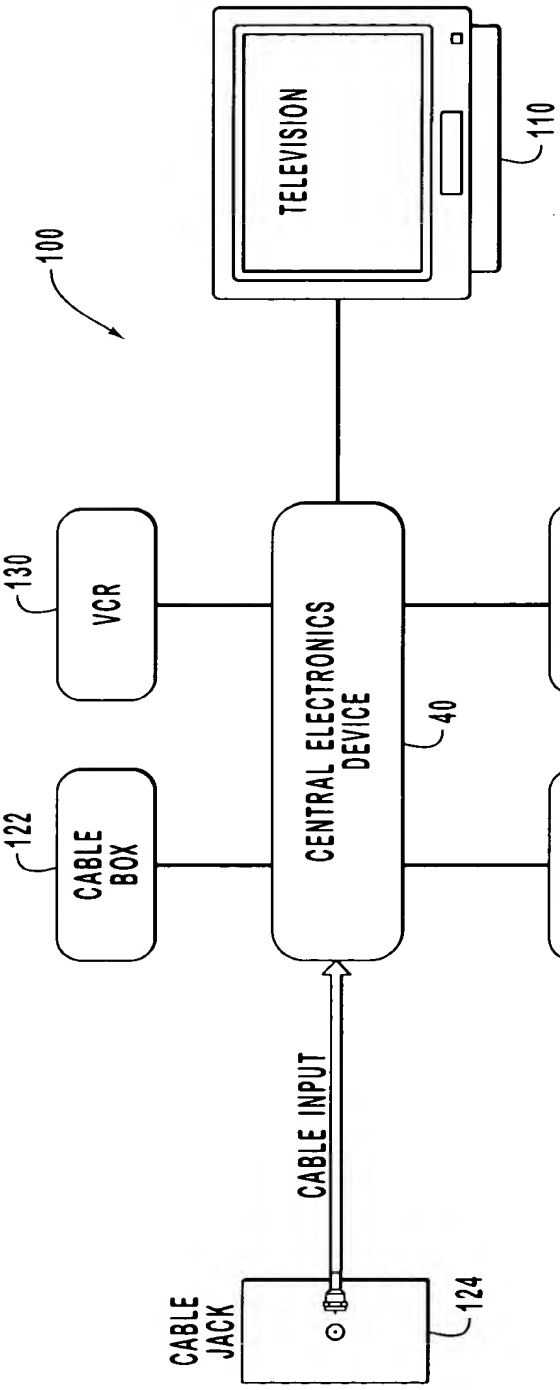
100
TELEVISION
110
VCR
130
CABLE BOX
122
CENTRAL ELECTRONICS DEVICE
40
CONSUMER ELECTRONICS DEVICE
108
CONSUMER ELECTRONICS DEVICE
106
CABLE INPUT
CABLE JACK
124

FIG. 6

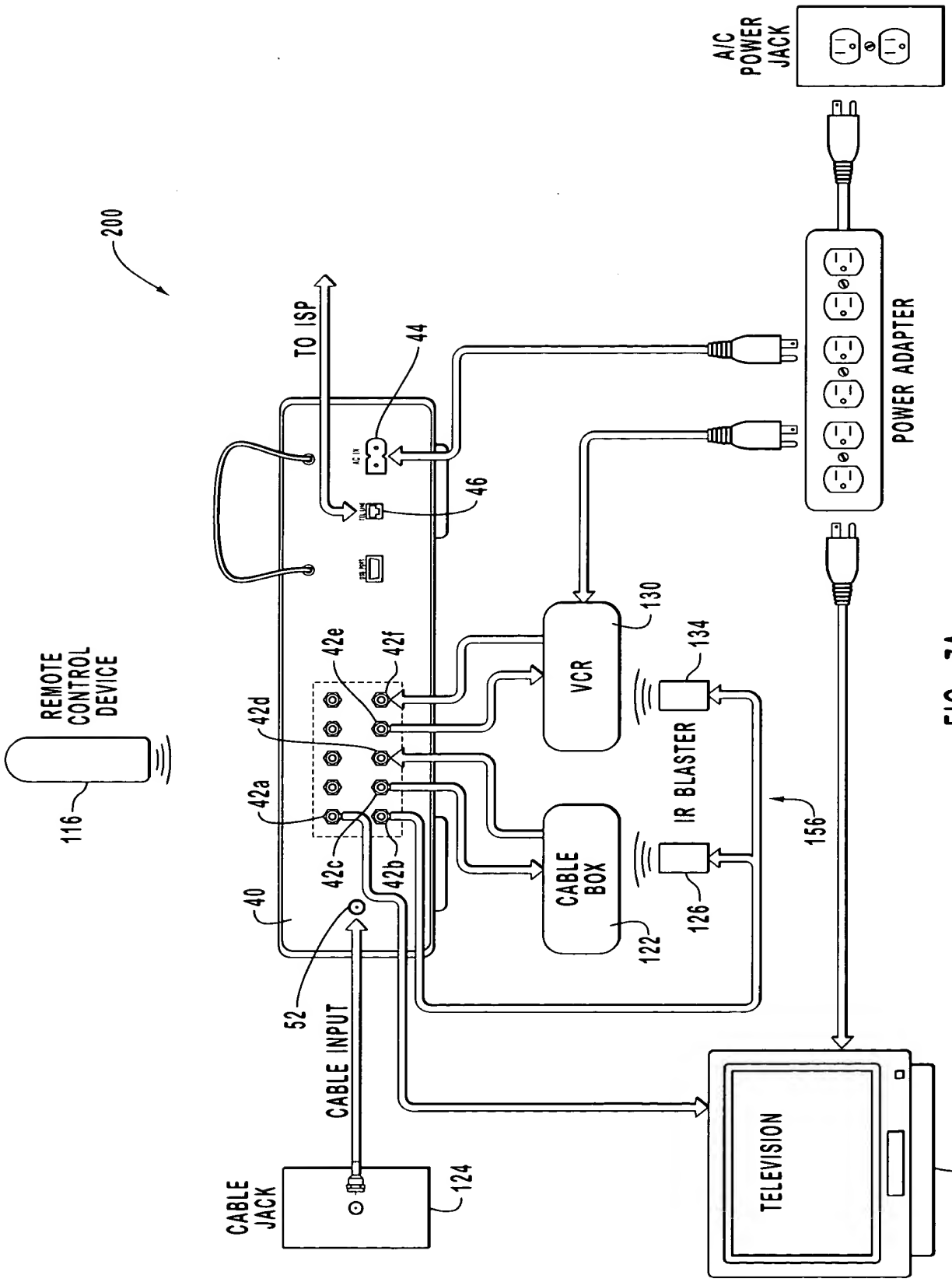
200
A/C POWER JACK
POWER ADAPTER
TO ISP
44
46
AC IN
TELCO
USB PORT
REMOTE CONTROL DEVICE
116
42e
42f
42d
42a
42c
42b
40
52
CABLE INPUT
CABLE JACK
124
VCR
130
134
IR BLASTER
CABLE BOX
122
126
156
TELEVISION
110

FIG. 7A

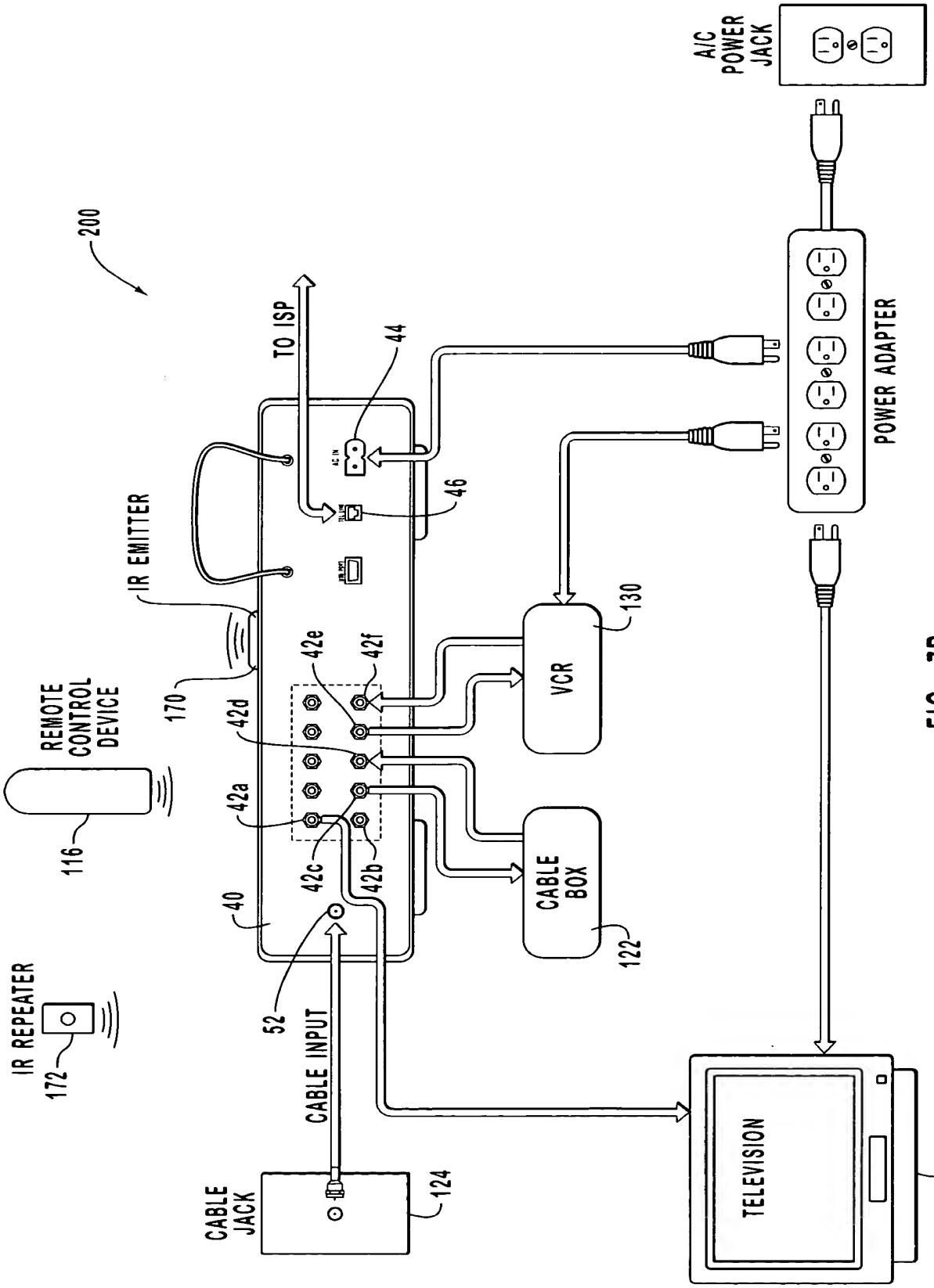
200
A/C POWER JACK
POWER ADAPTER
TO ISP
44
46
IR EMITTER
170
REMOTE CONTROL DEVICE
116
42e
42f
42d
42a
42c
42b
40
VCR
130
CABLE BOX
122
52
CABLE INPUT
IR REPEATER
172
CABLE JACK
124
TELEVISION
110

FIG. 7B

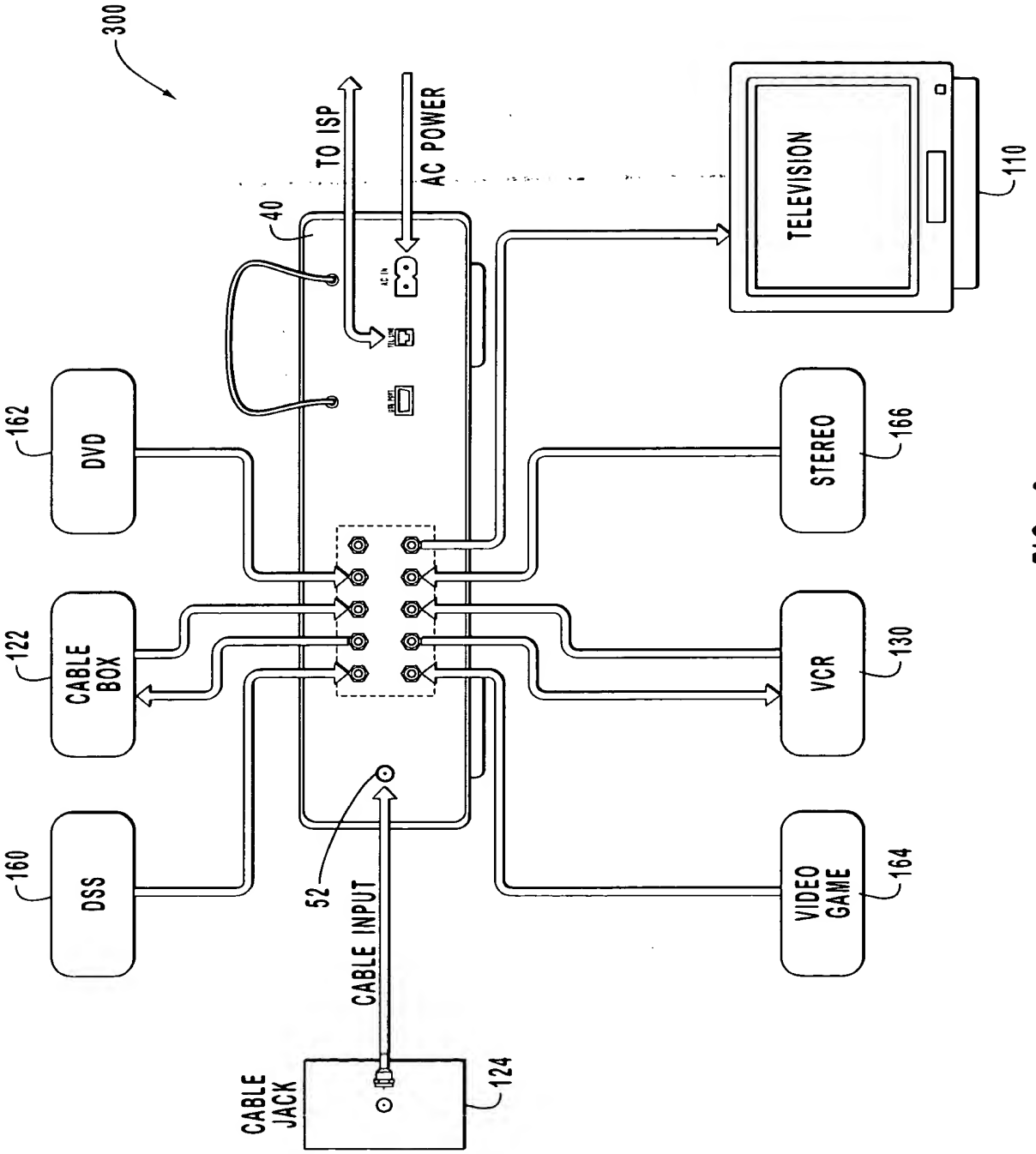
300
TO ISP
AC POWER
40
TELEVISION
110
162
DVD
122
CABLE BOX
160
DSS
52
CABLE INPUT
CABLE JACK
124
STEREO
166
VCR
130
VIDEO GAME
164

FIG. 8

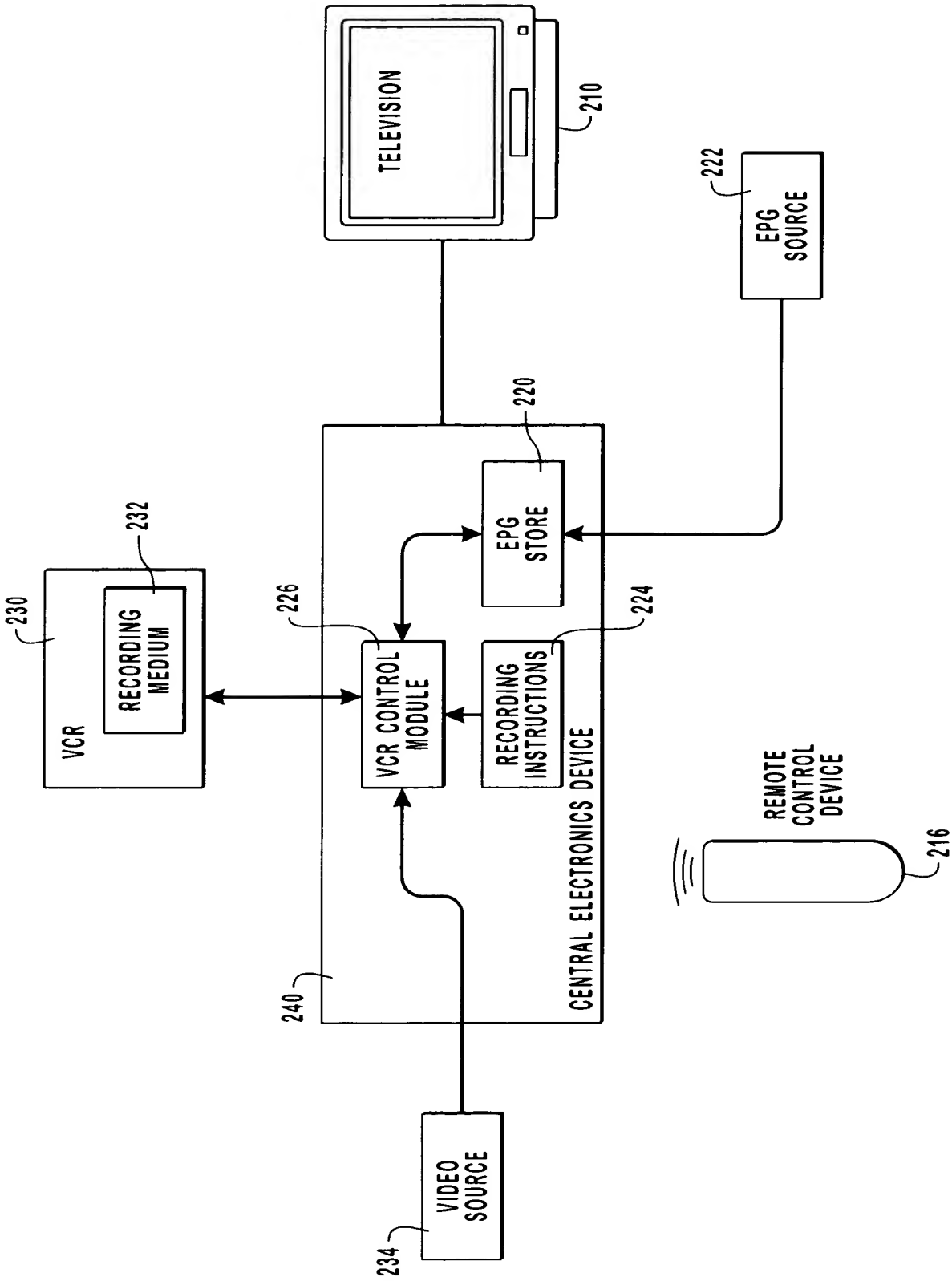
TELEVISION
210
222
EPG SOURCE
220
EPG STORE
232
230
RECORDING MEDIUM
VCR
226
VCR CONTROL MODULE
224
RECORDING INSTRUCTIONS
CENTRAL ELECTRONICS DEVICE
REMOTE CONTROL DEVICE
216
240
VIDEO SOURCE
234

FIG. 9

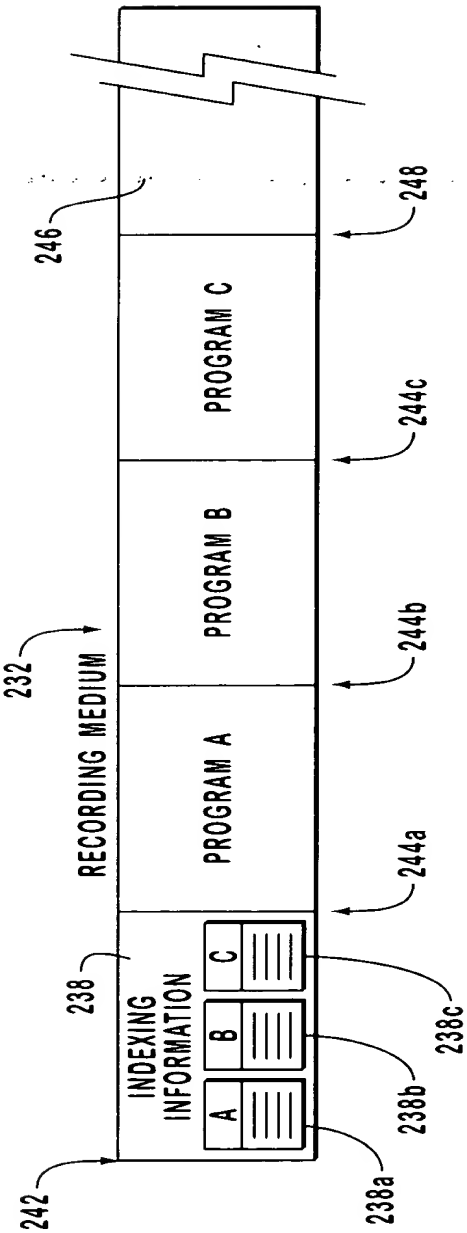
RECORDING MEDIUM
INDEXING INFORMATION
A
B
C
PROGRAM A
PROGRAM B
PROGRAM C
232
238
242
238a
238b
238c
244a
244b
244c
246
248

FIG. 10

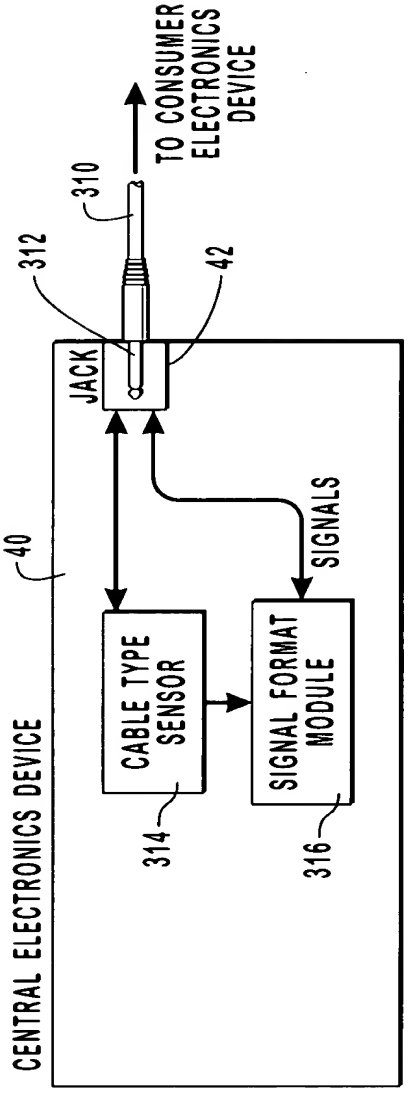
TO CONSUMER ELECTRONICS DEVICE
310
312
42
JACK
40
SIGNALS
CABLE TYPE SENSOR
SIGNAL FORMAT MODULE
314
316
CENTRAL ELECTRONICS DEVICE

FIG. 11

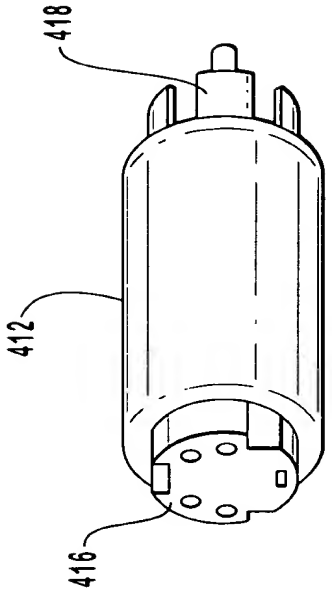

FIG. 12B

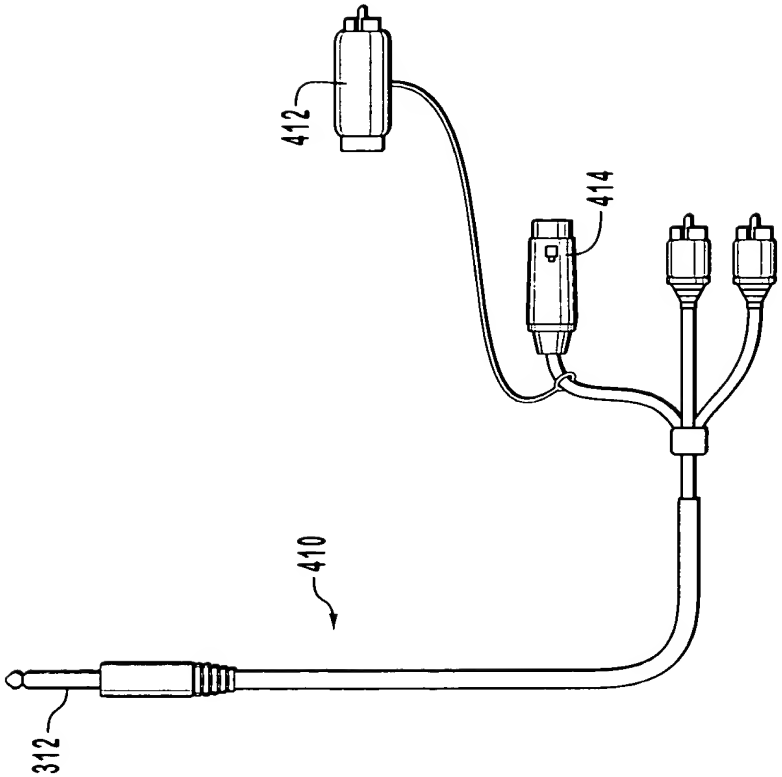

FIG. 12A

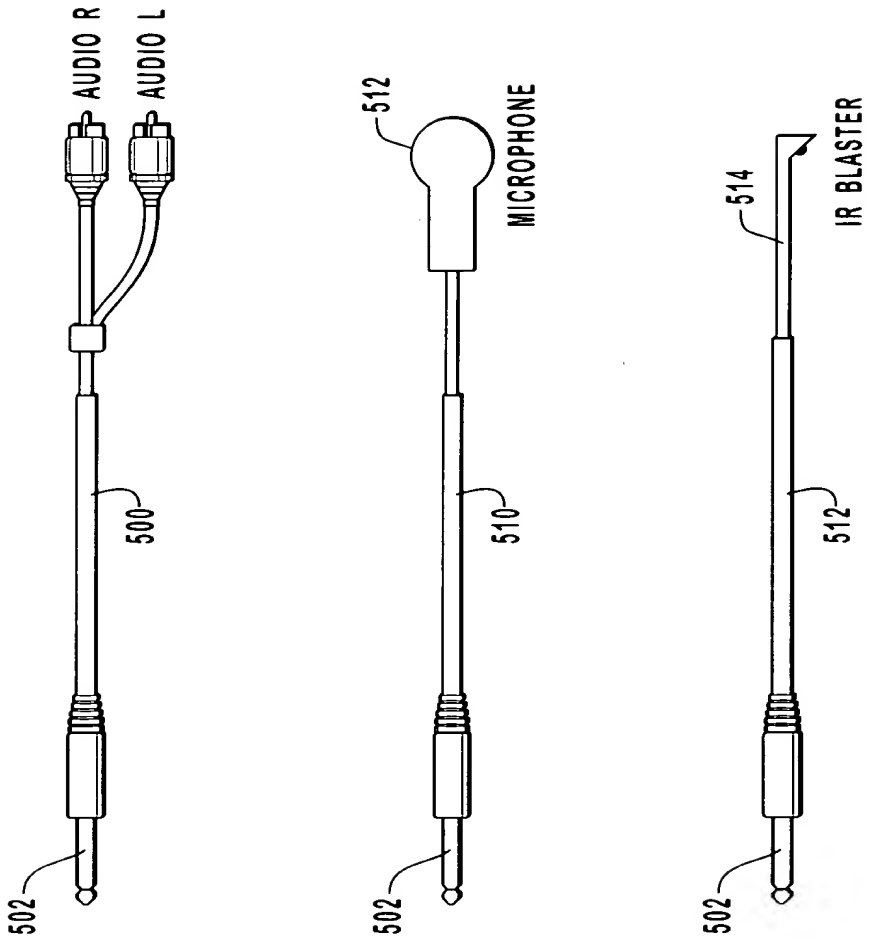
AUDIO R
AUDIO L
500
502
512
MICROPHONE
510
502
514
IR BLASTER
512
502

FIG. 13